



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,483	04/19/2001	Hiroyuki Oka	K-1973	9920

7590 07/13/2004
KANESAKA AND TAKEUCHI
1423 Powhatan Street
Alexandria, VA 22314

EXAMINER

KING, BRADLEY T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,483

Applicant(s)

OKA ET AL.

Examiner

Bradley T King

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) 4-8,12,19 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,9-11,13-18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 9-11, 13-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willmann et al (US#5853229) in view of Seibert et al (US#4730877).

Willmann et al disclose a braking system including; a master cylinder having an input shaft which travels according to travel of a brake operational member by the braking operation, a master cylinder pressure chamber, and a master cylinder piston which develops master cylinder pressure in the master cylinder pressure chamber according to a travel of the input shaft (the structure is inherent to master cylinders), a brake force control device having a pump 136 controlling, in a service braking operation, a discharge pressure of the pump according to the operational conditions of the service braking system and the regenerative braking system, a controller for operating the pump according to the master cylinder pressure, said pump, upon operation by the controller, sucking brake fluid from the master cylinder pressure chamber and discharging the brake fluid at the discharge pressure controlled by the braking force control device (see connection 176), a wheel cylinder 104 for receiving the brake fluid at

Art Unit: 3683

the discharge pressure controlled by the braking force control device and generating a braking force. Willmann et al lack a travel modulator. Seibert et al disclose a similar braking system and further teach a travel modulating device 37 controlled by the discharge pressure of a pump to control the operational characteristics of the modulator, thereby allowing consistent pedal feel and travel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the travel modulator taught by Seibert et al in the system of Willmann et al to reduce the size and manufacturing efforts (see column 1, lines 60-65 of Seibert et al) and provide a degree of adjustability of the travel characteristics of the master cylinder (column 2, lines 17-22), increasing driver comfort.

Regarding claims 10-11, Siebert et al disclose a modulating piston 38 having different diameter piston portions.

Regarding claim 13, Siebert et al disclose biasing means 39.

Regarding claim 14, Siebert et al disclose metal seals (interpreted in light of the instant disclosure) on both piston portions.

Regarding claims 16-17, Willmann et al symbolically disclose a brake pressure intensifying device (pneumatic booster near reference number 100). The features of claim 17 are inherent to conventional vacuum boosted master cylinders.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

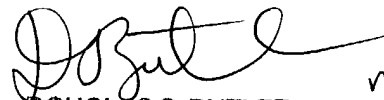
Art Unit: 3683

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BTK


DOUGLAS C. BUTLER
PRIMARY EXAMINER
7/6/04
AU3683